

CALIFORNIA'S CRITICAL COASTAL AREAS NPS WATERSHED ASSESSMENT & ACTION PLAN OUTLINE

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Critical Coastal Areas Committee

A myriad of local and regional groups are active in water quality protection and restoration efforts in California's coastal watersheds. The Critical Coastal Areas (CCA) Committee recognizes the great work being done at the local level, and the many watershed plans developed collaboratively to address coastal and marine resource issues throughout the coast.

The CCA Program is intended to build upon local efforts and to add value to the work already underway in a watershed, by focusing on application of **Management Measures**¹ to address existing or potential nonpoint source (NPS) pollution impacts to coastal and marine resources. Many watershed plans do not identify all the NPS pollution impacts to their coastal resources, nor do they include Management Measures for addressing these impacts—the CCA Program can help fill this gap.

This program may also provide an opportunity to bring together multiple interest groups in a watershed, to promote a collaborative watershed approach to addressing NPS pollution. The CCA Program is an important component of California's Nonpoint Source Pollution Control Program,² and has been included in the Governor's 2004 Ocean Action Plan.³

The planning process for individual CCAs consists of two components:

- 1) Conducting a **NPS Watershed Assessment** that identifies and evaluates existing and potential NPS pollution impacts to coastal and marine resources, by compiling and analyzing available data.
- 2) Developing an **Action Plan** that identifies all the steps required to address NPS impacts and improve water quality conditions in the CCA's watershed, including application of appropriate Management Measures.

This outline provides guidance in structuring and developing a CCA NPS Watershed Assessment and Action Plan ("Action Plan"), plus tools and tips for preparing the Action Plan (Appendix A).⁴ The Action Plan should be customized for each watershed to reflect the local conditions and particular NPS pollution issues, and to build on and complement existing watershed plans and efforts. It is expected that a Local CCA Committee (comprised of watershed groups, special interest organizations, government agencies, and community members) will be formed to develop the Action Plan for a CCA. The Action Plan is intended for multiple audiences in addition to the Local CCA Committee, including local government officials and planners, funding agencies, and legislators.

¹ For more information on Management Measures to address NPS pollution, see *California Nonpoint Source Encyclopedia* at <http://www.swrcb.ca.gov/nps/encyclopedia.html>, and <http://www.coastal.ca.gov/nps/npsndx.html>.

² *The Plan for California's Nonpoint Source Pollution Control Program* is available at <http://www.coastal.ca.gov/nps/npsndx.html#NPS> and <http://www.waterboards.ca.gov/nps/protecting.html>.

³ *Protecting Our Oceans: California's Action Strategy; Final Report to Governor Arnold Schwarzenegger*. 2004. California Resources Agency and California Environmental Protection Agency. Pg. 27. See http://resources.ca.gov/ocean/Cal_Ocean_Action_Strategy.pdf.

⁴ This CCA NPS Watershed Assessment and Action Plan outline is derived in part from the *Morro Bay Comprehensive Conservation and Management Plan* (CCMP), and California Coastal Conservancy guidance.

A. NPS WATERSHED ASSESSMENT

Description:

The NPS Watershed Assessment provides necessary background information and characterization of the watershed, to direct the development of the Action Plan. The NPS Watershed Assessment component should build on existing efforts, as appropriate, and include the following sections:

Sections:

(1) Evaluation of the status of water quality conditions in the CCA

- Identify water quality impairments, and potential sources of impairments, in coastal waterbodies in the CCA (e.g., 303(d) listed as impaired by NPS pollutants, experience persistent beach postings/closures, etc.). Build on *State of the CCAs Report*⁵ data as appropriate.
- Identify coastal and marine natural resources, and indicate sensitive, high resource value areas.
- Identify potential for future NPS impairment of coastal water quality and impact to sensitive, high resource value areas (i.e., “threats”).
- Assess land use, topography, and hydrology; where available, include percent impervious surface area coverage.
- Describe historical and existing conditions (i.e., snapshot of past land uses and current setting). Possible ways to organize: (1) land use (e.g., urban, agriculture, forestry); (2) resources (e.g., wetlands, fisheries, beaches); (3) water quality issues (e.g., beach postings/closures, excess erosion, heavy metals); or (4) by sub-watershed.

(2) Delineation of CCA and watershed planning area boundaries

- As indicated in the *CCA Draft Strategic Plan*⁶, the seaward boundary of a CCA will be the mean high-tide line, the initial inland boundary will be the Coastal Zone inland boundary, and boundaries along the shoreline will be determined on a case-by-case basis.
- Determine whether evidence of NPS pollution impact or threat necessitates extending the inland boundary of the watershed planning area farther inland (e.g., if significant sources of NPS pollution come from inland of the Coastal Zone).
- Determine appropriate CCA boundaries along the shoreline.

(3) Identification of existing and planned water quality programs, projects, and plans affecting the CCA

- Identify the local, state, and federal agencies and other organizations actively involved in watershed protection or restoration.
- Identify potential partners and opportunities for coordination.

⁵ For more information on the *State of the CCAs Report*, see <http://www.coastal.ca.gov/nps/cca-nps.html>.

⁶ Protecting Coastal Waters: State of California 2002 Critical Coastal Areas Draft Strategic Plan. See <http://www.coastal.ca.gov/nps/cca-strategy.pdf>.

- Review roles, activities, projects, and watershed plans (and other relevant plans) of existing watershed groups, local governments, and other entities affecting the CCA.
 - Identify relevant water quality protection programs that may affect the CCA (e.g., NPS pollution grant programs, Clean Beach Initiative grants, total maximum daily load (TMDL) regulatory efforts to address impaired waters on the State's 303(d) list, efforts of the Joint Taskforce on California Watershed Management, Regional Water Boards' Watershed Management Initiatives, etc.).
- (4) Analysis and evaluation of existing or planned programs, projects, and plans**
- Determine whether existing or planned programs, projects, and plans identify NPS pollution impacts or threats to the CCA, and whether they include Management Measures to address these impacts or threats.
 - Where Management Measures are included in plans, determine whether these Management Measures are sufficient to address the specific NPS impacts or threats.
- (5) Identification of gaps in NPS pollution prevention plans in watershed**
- Indicate gaps where existing or planned programs, projects, and plans:
 - a) do not identify specific NPS impacts or threats in the CCA watershed;
 - b) do identify NPS issues, but Management Measures are not included to address NPS impacts or threats; or
 - c) do identify NPS impacts or threats, and Management Measures are included, but the Management Measures are not sufficient to address the problem.
 - Indicate if no existing or planned programs, projects, and plans were identified that address NPS impacts or threats in the CCA watershed area.
 - Determine if other gaps exist (e.g., data gaps, additional information needs, etc.)
- (6) Summary**
- Include bulleted list compiled of all NPS Watershed Assessment findings
 - Discuss gaps and potential strategies for Action Plan development

B. ACTION PLAN

Description:

The Action Plan is intended to be a roadmap and planning tool that builds directly on the NPS Watershed Assessment, and should be adaptive to reflect changing conditions and new opportunities. The Action Plan should include the following components, as appropriate:

Sections:

(1) Statement of problem

- Describe why the Action Plan is needed and what coastal NPS water quality issues it intends to address.
- Include a “no-action” alternative.

(2) Identification of goals and specific objectives for the CCA project

- Ensure goals and objectives are specific, achievable, and measurable.
- Include both short-term and long-term goals and objectives.
- If this Action Plan builds on a watershed plan (or other existing plan or project) that includes clearly stated goals and objectives, ensure that the goals and objectives encompass water quality protection.

(3) Description of CCA project’s methodology

- Describe anticipated formation, organization, and structure of a Local CCA Committee.
- Show that participating entities have the necessary legal authority/jurisdiction to carry out the specific goals and objectives, Management Measures, etc.
- Describe anticipated stakeholder participation in planning process, and outreach to stakeholders.
- Describe public outreach strategies, including outreach to local elected officials.

(4) Identification of Management Measures and actions to address site-specific NPS pollution

- List currently implemented or planned Management Measures and actions, as identified in the NPS Watershed Assessment.
- Identify potential additional Management Measures and actions to address site-specific NPS pollution impacts or threats.

(5) Discussion of opportunities and constraints for suite of actions

- Consider multiple benefits that can be realized from actions.
- Factor in community priorities, including socio-economic concerns.
- List available resources that can be used to implement actions (e.g., possible funding, staff resources, coordination with local agencies, etc.).
- Identify obstacles that may constrain implementation of actions.

(6) Recommendations

- Prioritize suite of actions (see Appendix A, Recommendations).
- Consider both short- and long-term recommendations. For example: short-term, conduct remediation; long-term, work with local agencies to incorporate relevant recommendations into General Plan policy language.
- Provide a conceptual plan for implementing high-priority recommendations (as appropriate).

(7) Description of metrics for measuring project's success, and success criteria

- Public outreach to community and watershed groups, and coordination with existing efforts.
- Outreach to local elected officials (e.g., Nonpoint Education for Municipal Officials (NEMO)).
- Incorporation of resource-based watershed principles into applicable state and local programs.
- Changes to land use planning documents (e.g., General Plans or Local Coastal Plans (LCPs) reflect recommendations from CCA project).
- Water quality improvement documented through water quality monitoring (see Appendix A, Monitoring Program).

(8) Description of process for review and adaptive management of Action Plan

- Identify timeframe and process for review and revisions.

(9) Summary

APPENDIX A.

TOOLS AND TIPS FOR PREPARING NPS WATERSHED ASSESSMENT & ACTION PLAN

GENERAL

- Documents should be concise, tightly scripted, and to the point.
- Technical terms, methods, and analyses should be explained.
- Existing conditions should be described.
- Findings should be clearly substantiated by data and analyses.
- Limitations on analyses or data collection should be included and discussed.

GRAPHICS

- Simple tables, graphs, and other illustrations should be used where possible, but most data should be included in technical appendices.

The types of graphics that could be incorporated into the Assessment include:

- Map of the watershed area with major landmarks and land uses identified.
- Maps detailing historical and/or existing conditions in each assessment area (e.g., aerial and historical maps and photos).
- Map of major water quality problem areas, major land use distinctions, and other problem areas, with overlay of coastal resources. Recommended projects should be identified, and keyed to a matrix. The matrix helps funding agencies decide what would be gained by doing a project, and in which order to do them.
- Photographs of key problem areas, especially at proposed monitoring locations.
- Graphs or tables that dramatically document trends in water quality, aquatic habitat, coastal impacts and indicators, etc.

Additional graphics that could be incorporated into the Action Plan include:

- Map(s) indicating recommended project sites (keyed to narrative and matrix, and coded by priority).
- Tables and graphs that support findings.

RECOMMENDATIONS

- Where possible, recommendations identified in the Action Plan should follow from the findings; should be organized by a matrix; and (where appropriate) should include a narrative discussion of both management and project recommendations, and areas for further study. The matrix helps the reader to quickly establish priorities and understand the anticipated time frame within which to initiate projects.

A matrix should at a minimum include the following elements:

- Prioritized recommendations (e.g., high, medium, low).
- Phasing of when to initiate project (e.g., Phase 1: 0-5 years, Phase 2: 5-10 years, Phase 3: 10-15 years).
- Lead organization or agency.
- Problem being addressed.
- Benefits to be expected.
- Estimated costs.
- Permits needed, and other implementation issues.

MONITORING PROGRAM

- Identify purpose of monitoring program.
- Identify monitoring parameters, including objectives, baseline data, success criteria, monitoring methods, locations, schedule, lead agency, and costs.
- Describe data management and reporting.
- Describe how monitoring program will be adaptively managed.
- Describe how monitoring data may lead to adaptation of Management Measures and recommended actions.

TECHNICAL APPENDICES

- Intended for peer reviewers and others interested in the protocols, data, and analyses of the assessments.
- Include technical reports detailing the methodologies, data collected, analyses, and results of the assessments.
- May be organized as individual assessment reports, or in other formats as appropriate.

EXECUTIVE SUMMARY

- Brief, easy to read, non-technical, sums up major points concisely.
- Clarifies what is needed to move forward and why it's important.
- Can be a public relations tool that captures attention and generates interest.
- Maps, graphics, and tables should be used to illustrate points without being data intensive.

The Executive Summary may include:

- Statement of Problem -- nature of NPS problems affecting watershed (taken from NPS Watershed Assessment), why Action Plan is needed, and any constraints limiting work.
- Goals and Objectives of Plan -- plan should be living proof these were accomplished.
- Planning Process, Participants, and Methodology -- brief, high-level, non-technical.
- Bulleted list of major findings.
- Implementation goals and objectives -- should tie in directly to the monitoring program to be able to track success and demonstrate benefits; can also include socio-economic outcomes.
- Summary/matrix of recommendations.
- Next steps -- who needs to take what action, list of highest priority projects and management changes, funding and permits needed, other obstacles to overcome, etc.